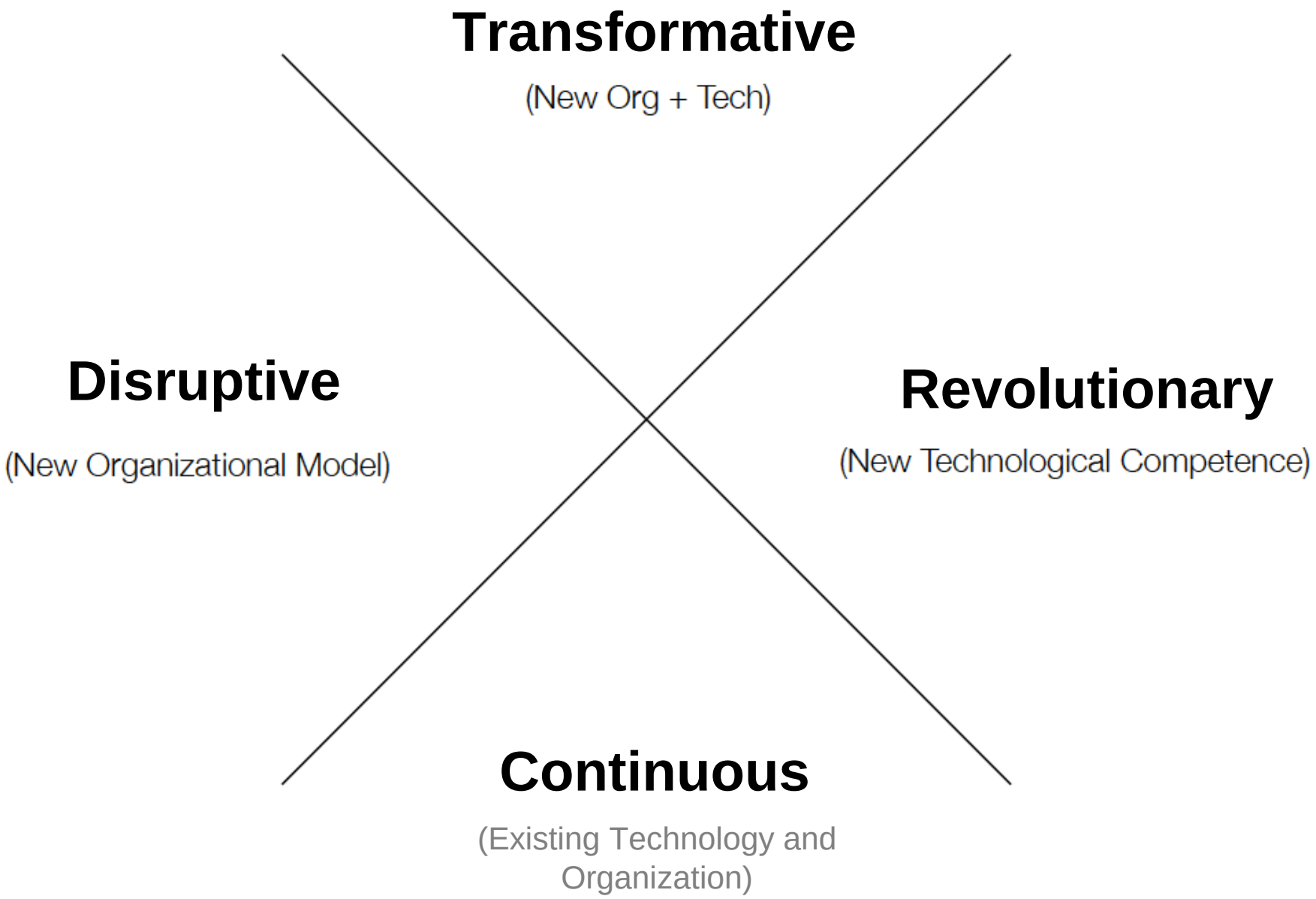
The Innovation Landscape @ NASA:

Promising Practices, Framework, and Sustainability

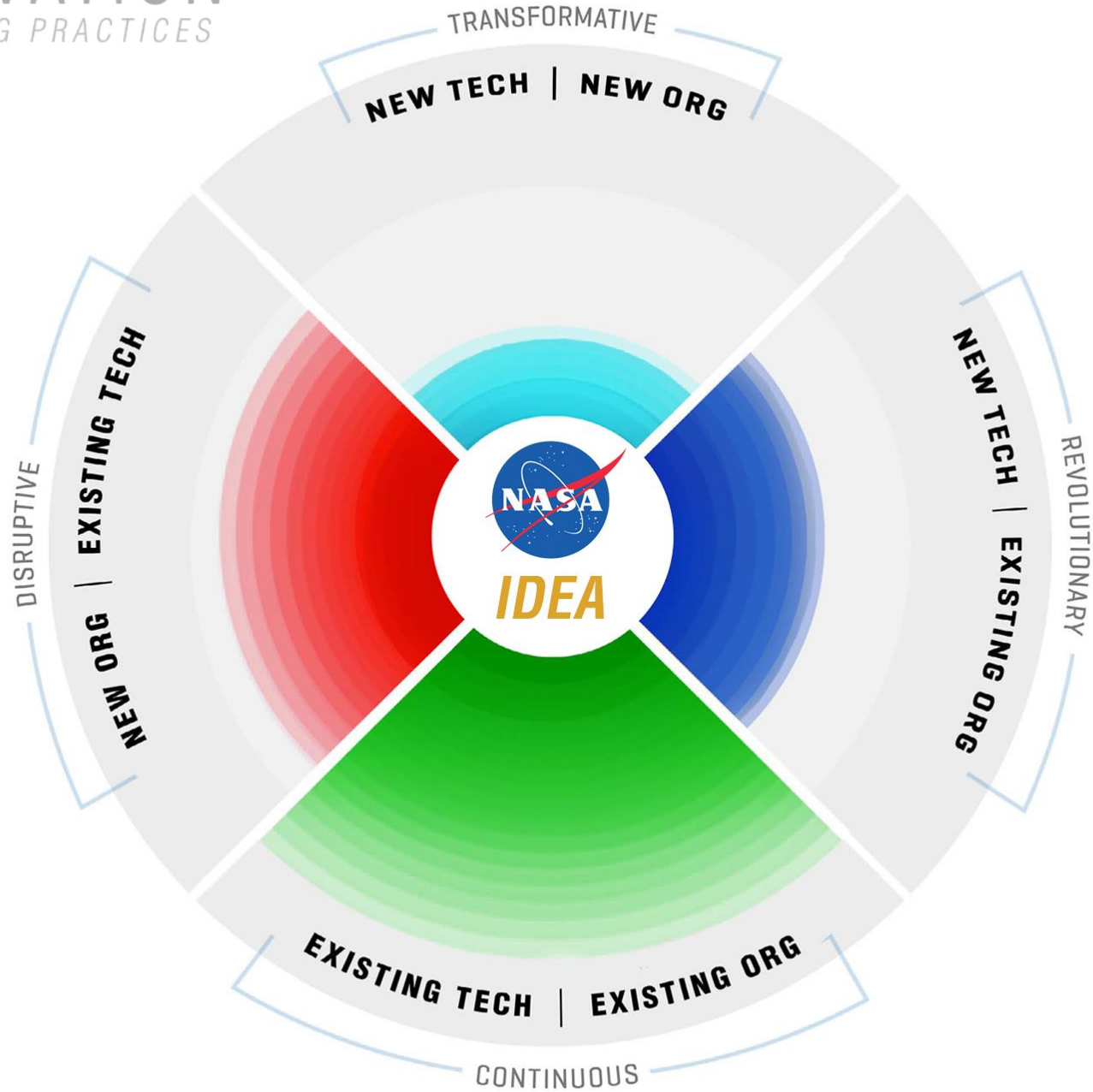
Dr. Dava Newman
Deputy Administrator

@DavaExplorer



Artwork Credit: JPL Studio

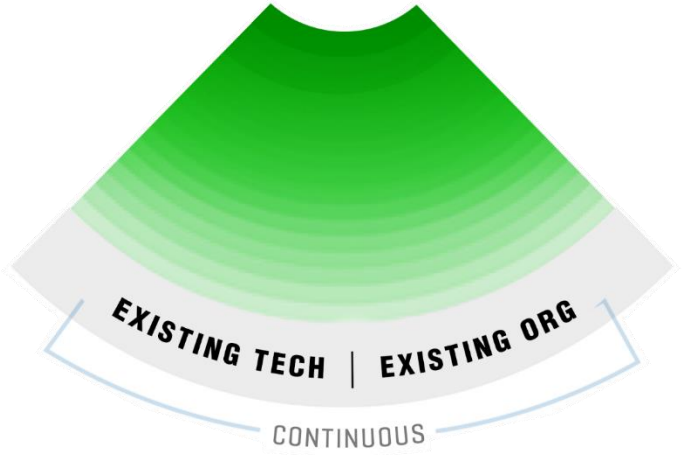
INNOVATION
PROMISING PRACTICES



INNOVATION
PROMISING PRACTICES

EXISTING TECHNOLOGY
EXISTING ORGANIZATION

C O N T I N U O U S



EXAMPLES of PROMISING PRACTICES

Blue Sky Events

Center Innovation Fund Program

Creativity & Innovation Initiative

Digital Learning Network

MissionSTEM

Early Career Initiative

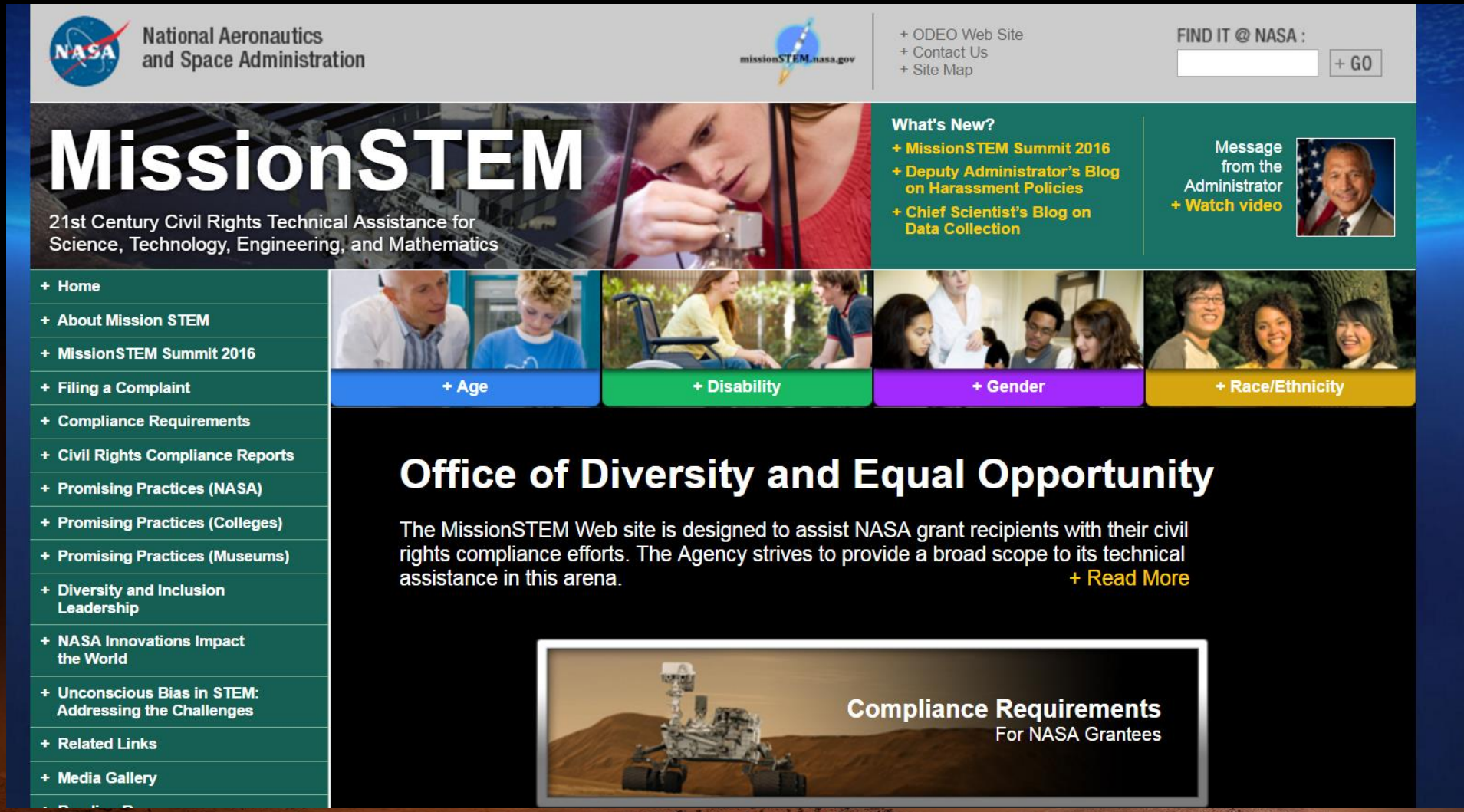
Engineering Design Studio

Ethics Based Decision Framework

Digital Learning Networks

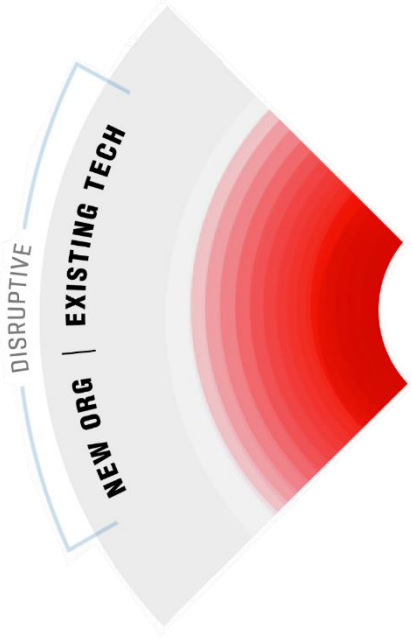
National Aeronautics and Space Administration

#JOURNEYTOMARS


National Aeronautics and Space Administration
missionSTEM.nasa.gov
+ ODEO Web Site
+ Contact Us
+ Site Map
FIND IT @ NASA :
+ GO
MissionSTEM
21st Century Civil Rights Technical Assistance for Science, Technology, Engineering, and Mathematics
What's New?
+ MissionSTEM Summit 2016
+ Deputy Administrator's Blog on Harassment Policies
+ Chief Scientist's Blog on Data Collection
Message from the Administrator
+ Watch video
+ Home
+ About Mission STEM
+ MissionSTEM Summit 2016
+ Filing a Complaint
+ Compliance Requirements
+ Civil Rights Compliance Reports
+ Promising Practices (NASA)
+ Promising Practices (Colleges)
+ Promising Practices (Museums)
+ Diversity and Inclusion Leadership
+ NASA Innovations Impact the World
+ Unconscious Bias in STEM: Addressing the Challenges
+ Related Links
+ Media Gallery
+ Age
+ Disability
+ Gender
+ Race/Ethnicity
Office of Diversity and Equal Opportunity
The MissionSTEM Web site is designed to assist NASA grant recipients with their civil rights compliance efforts. The Agency strives to provide a broad scope to its technical assistance in this arena.
+ Read More
Compliance Requirements
For NASA Grantees

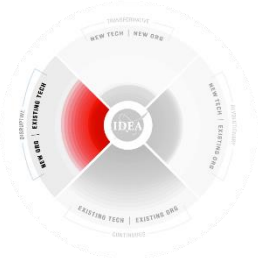

MissionSTEM
Office of Diversity and Equal Opportunity
Compliance Requirements
Promising Practices
Promising Practices
NASA
2016
MissionSTEM
Summit
NASA

INNOVATION
PROMISING PRACTICES



NEW ORGANIZATION
EXISTING TECHNOLOGY

D I S R U P T I V E



EXAMPLES of PROMISING PRACTICES

Centennial Challenges

Center of Excellence for Collaborative Innovation

Citizen Science and Open Innovation

Commercial Crew and Cargo Programs

Enterprise Cloud Computing Services for Engineering

NASA@Work

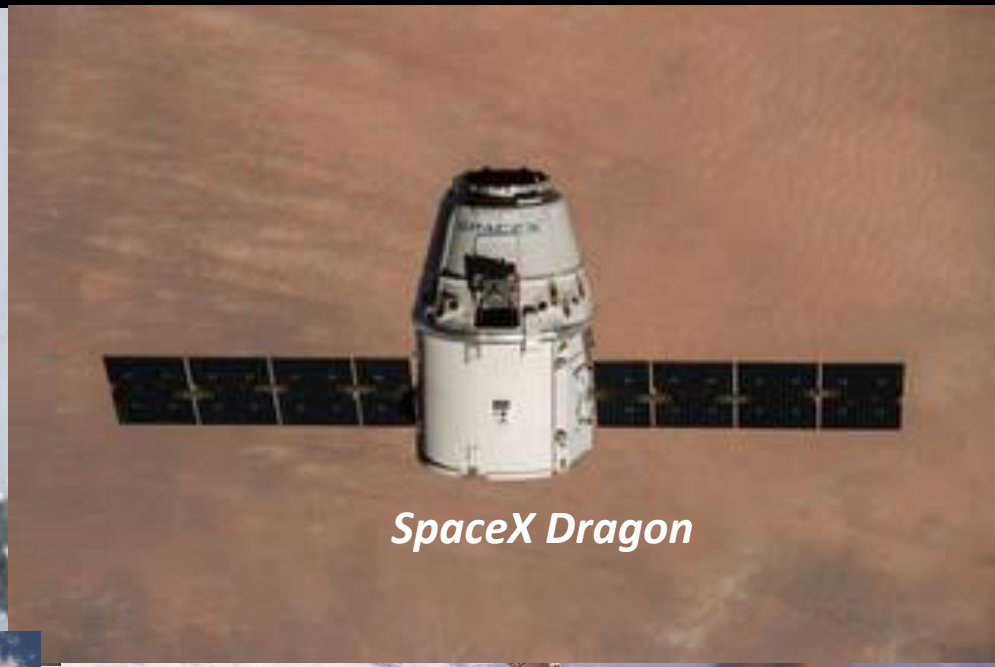
NASA Shared Services Center

NextStep Broad Agency Announcement

ISS Public-Private Partnerships

National Aeronautics and Space Administration

Orbital ATK Cygnus



SpaceX Dragon

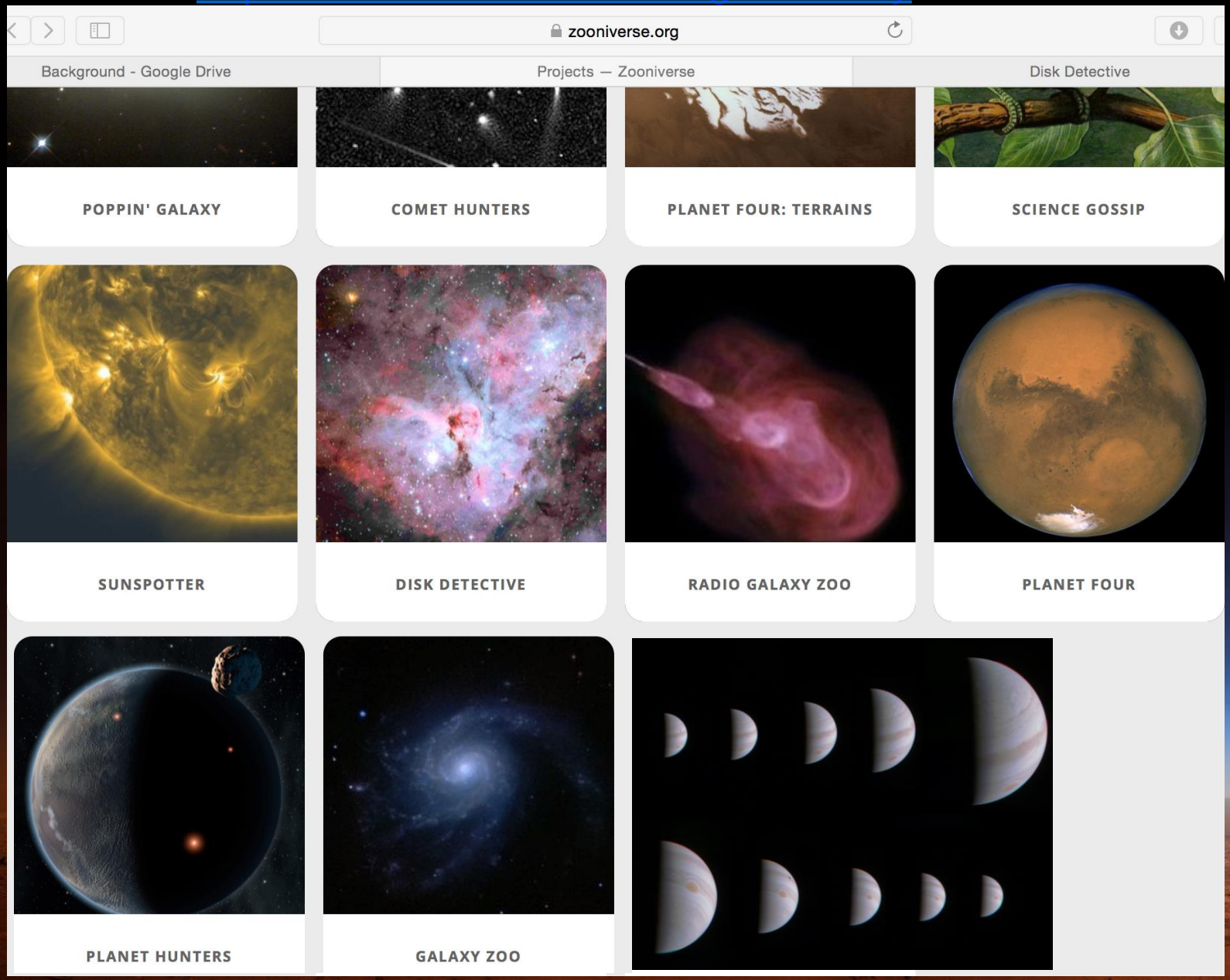
Russian Soyuz

JAXA HTV

Citizen Science

https://www.diskdetective.org/#/classify

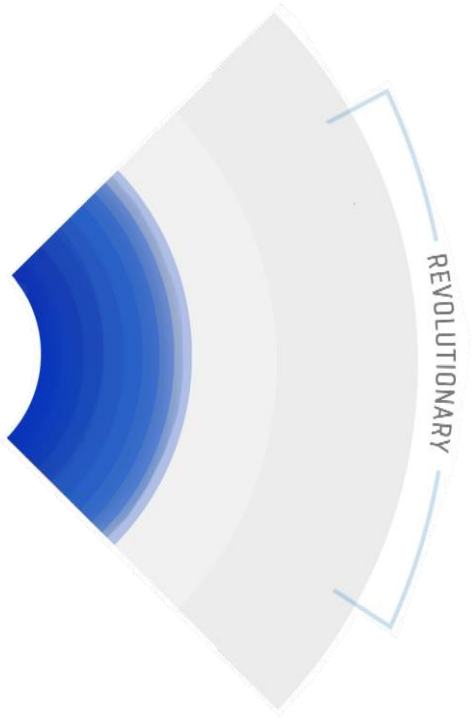
National Aeronautics and Space Administration



INNOVATION
PROMISING PRACTICES

NEW TECHNOLOGY
EXISTING ORGANIZATION

R E V O L U T I O N A R Y



EXAMPLES of PROMISING PRACTICES

Blended Wing Body Aircraft Design

Computational Digital Transformation

NASA's Transformative Aeronautics Concepts Program

James Webb Space Telescope

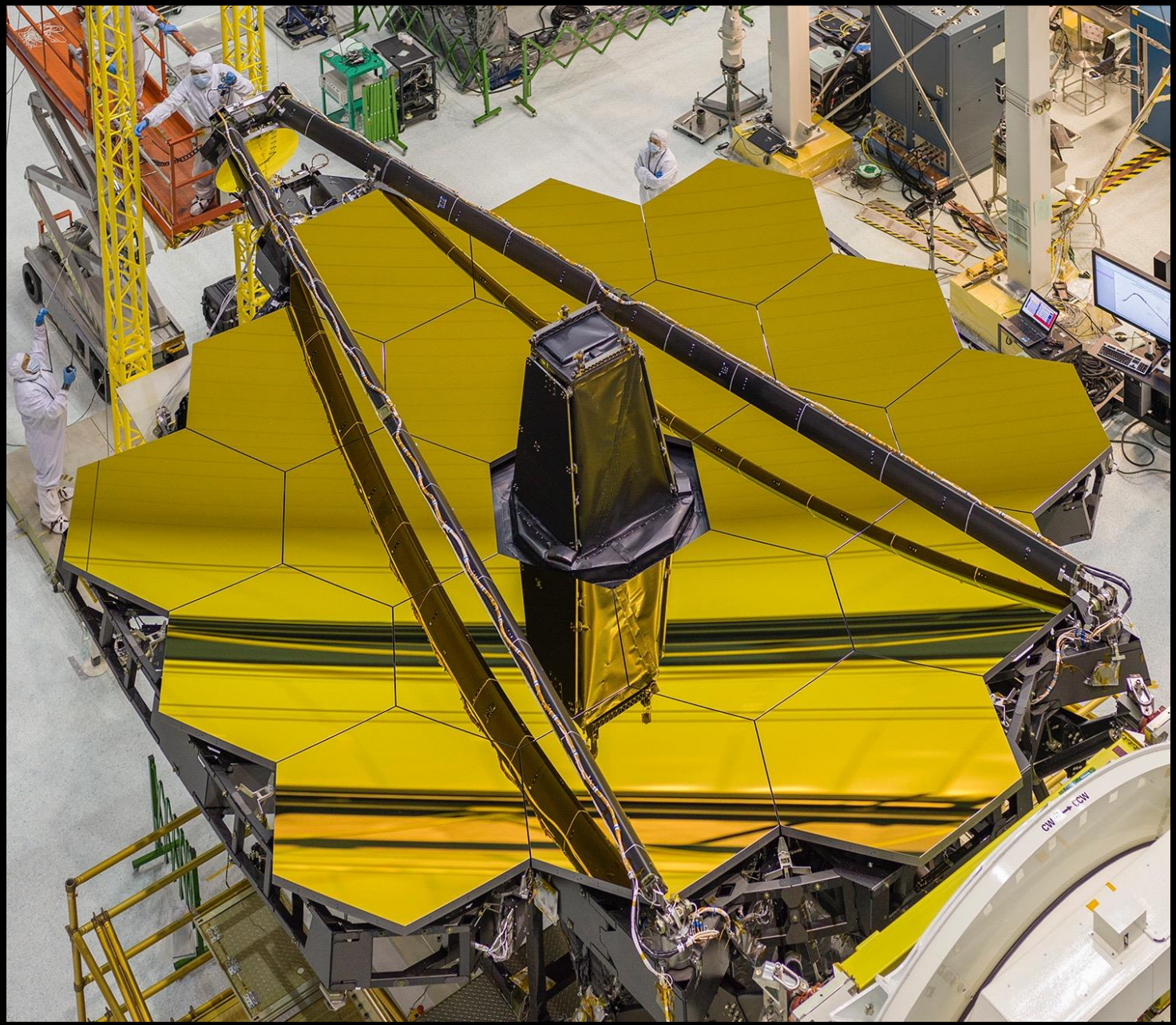
UAS Traffic Management

The Future of Flight

National Aeronautics and Space Administration

James Webb Space Telescope

National Aeronautics and Space Administration



INNOVATION
PROMISING PRACTICES

NEW TECHNOLOGY
NEW ORGANIZATION

TRANSFORMATIVE

EXAMPLES of PROMISING PRACTICES

Building and Operating the International Space Station

Studying Ocean Worlds and Extrasolar Planets

Expanding human presence in the solar system via Journey to Mars

Learning whether life exists in the solar system beyond earth

Enabling a transformation for safe and sustainable U.S. and global aviation

Understanding Global Climate Change

Minimizing the Impact of Space Debris

National Aeronautics and
Space Administration

16 Years of Human Habitation on ISS

National Aeronautics and Space Administration

National Aeronautics and Space Administration

Exoplanet Travel Bureau

RELAX ON KEPLER-16b

Like Luke Skywalker's planet "Tatooine" in *Star Wars*, Kepler-16b orbits a pair of stars. Depicted here as a terrestrial planet, Kepler-16b might also be a gas giant like Saturn. Prospects for life on this unusual world aren't good, as it has a temperature similar to that of dry ice. But the discovery indicates that the movie's iconic double-sunset is anything but science fiction.

NASA's Exoplanet Exploration Program, Jet Propulsion Laboratory, Pasadena CA.
exep.jpl.nasa.gov

www.nasa.gov

#JOURNEYTOMARS

JOURNEY TO MARS

All elements needed for a human Mars mission are in development now.

EARTH RELIANT
NOW - MID-2020s

ISS & commercial development of LEO

Deep space systems life support and human health

PROVING GROUND
2018-2030

Crewed missions, spacewalks in cislunar space

Deep space habitation; Shakedown cruise(s) for Mars

Integrated human and robotic operations

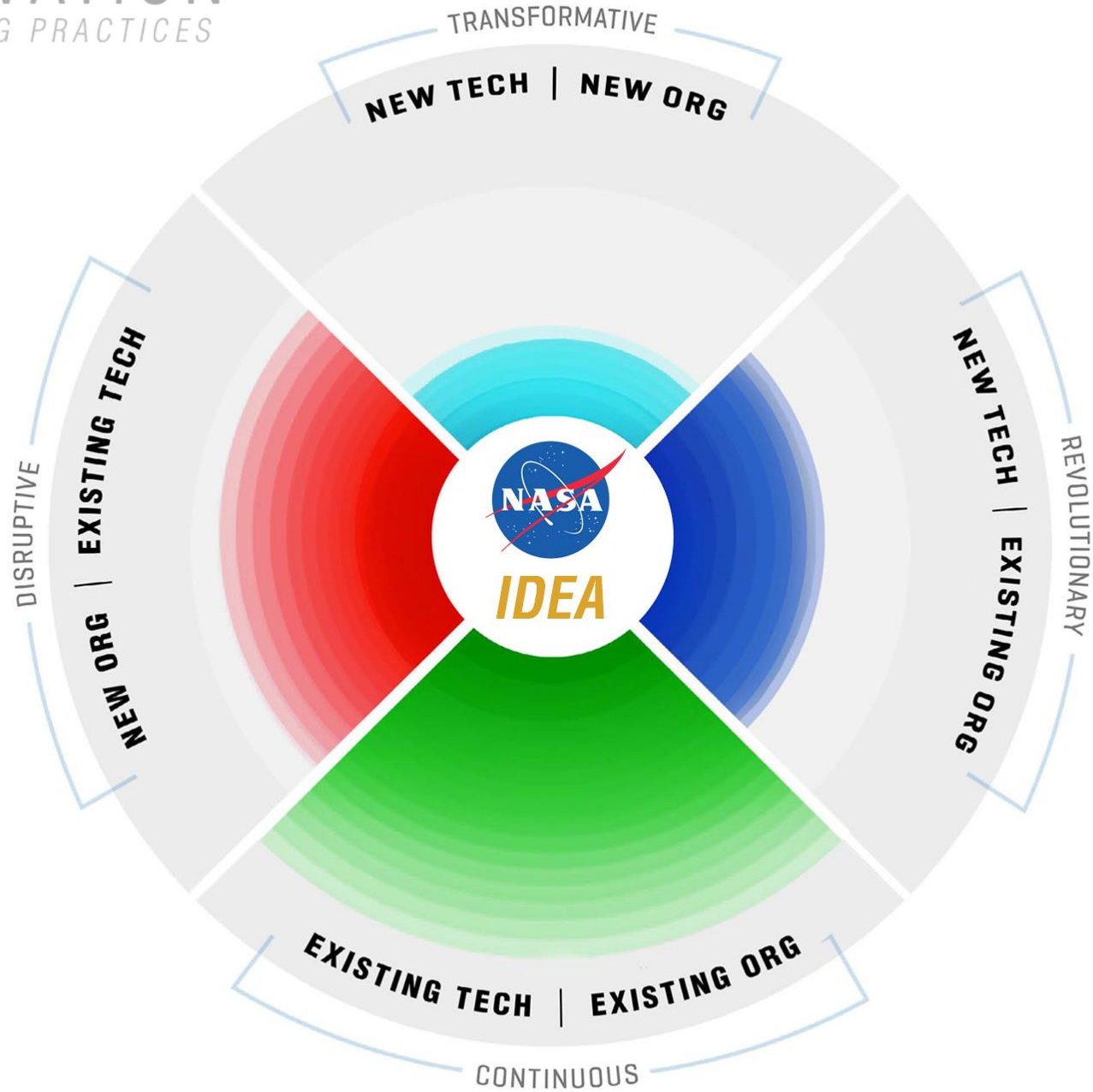
EARTH INDEPENDENT
NOW – 2030s and beyond

Science missions pave the way to Mars; Robotic roundtrip demonstration with sample return in the late 2020s

Entry, descent, and landing & in-situ resources

Send humans to orbit Mars in the early 2030s

INNOVATION
PROMISING PRACTICES



National Aeronautics and Space Administration

INNOVATION VISUAL HISTORY